



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------------|-------------|----------------------|---------------------|------------------|
| 10/519,359 | 12/28/2004 | Paul Burt | 122241 | 2993 |
| 25944 | 7590 | 12/12/2006 | EXAMINER | |
| OLIFF & BERRIDGE, PLC | | | EVANS, GEOFFREY S | |
| P.O. BOX 19928 | | | | |
| ALEXANDRIA, VA 22320 | | | ART UNIT | PAPER NUMBER |
| | | | 1725 | |

DATE MAILED: 12/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | |
|------------------------------|------------------------|---------------------|
| Office Action Summary | Application No. | Applicant(s) |
| | 10/519,359 | BURT ET AL. |
| | Examiner | Art Unit |
| | Geoffrey S. Evans | 1725 |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 25 September 2006.

2a) This action is **FINAL**. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 29,30 and 33-47 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) 29,30,33-47 is/are rejected.

7) Claim(s) _____ is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some * c) None of:

- 1) Certified copies of the priority documents have been received.
- 2) Certified copies of the priority documents have been received in Application No. _____.
- 3) Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.

4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.

5) Notice of Informal Patent Application

6) Other: _____.

DETAILED ACTION

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claim 29,33-42, and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Niwa et al. in Japan Patent No. 60-49,987 in view of Soga et al. in Japan Patent No. 8-238,587. Niwa et al. discloses a laser welding apparatus with a laser head (element 18) that focuses a laser beam, uses a nozzle (element 26) that supplies a gas to remove metallic vapor from the weld zone and has a diametrically opposed nozzle (element 30) to remove this vapor. Soga et al. teach using a jet of argon gas at an angle of 10-70 degrees (see paragraph 8) towards an impingement point on the workpiece surface to remove plasma and adjusting the distance X depending upon the welding conditions (see first sentence in paragraph 7). It would

have been obvious to adapt Niwa et al. in view of Soga et al. to provide this to suppress plasma so that laser welding can be accomplished efficiently by not having the laser beam attenuated by plasma.

4. Claims 30,44, and 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Niwa et al. in Japan Patent No. 60-49,987 in view of Soga et al. in Japan Patent No. 8-238,587 as applied to claim 29 above, and further in view of Aoyama in Japan Patent No. 2000-263,726 A. Aoyama teaches a nozzle (element 15) adjacent to the laser head to provide a jet of high velocity gas to protect a cover slide (element 13). It would have been obvious to adapt Niwa et al. in view of Soga et al. and Aoyama to provide this to fully protect the cover slide.

5. Claims 43 and 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Niwa et al. in view of Soga et al. and Aoyama as applied to claim 30 above, and further in view of Suzuki et al. in Japan Patent No. 59-223,191. Suzuki et al. teaches a nozzle made of a row of smaller outlets (see figure 4) to protect an optical element from spatter. It would have been obvious to adapt Niwa et al. in view of Soga et al., Aoyama and Suzuki et al. to provide this to fully protect the cover slide.

6. Applicant's arguments filed 25 September 2006 have been fully considered but they are not persuasive. The new limitations of "positioned behind the head, relative to the welding direction" and "in front of the head, relative to the welding direction" are merely statements regarding the manner of use of the apparatus. A claim containing a "recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus" if the

prior art apparatus teaches all the structural limitations of the claim. See Ex Parte Masham, 2 USPQ 2d 1647 (Bd. Pat. App. & Inter. 1987) and MPEP 2114. In claims 29,33-42 and 46 the apparatus is the same as that resulting from Niwa et al. in view of Soga et al.. The difference that during the process the orientation of the elements differs by 90 degrees (side nozzle instead of behind the laser beam movement) does not make the apparatus claims allowable since this is a method limitation. There is no way to distinguish between the two apparatuses in shipment before the apparatuses are used to perform seam welding.

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Geoffrey S Evans whose telephone number is (571)-272-1174. The examiner can normally be reached on Mon-Fri 6:30AM to 4:00 PM, alternate Fridays off.

Art Unit: 1725

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Pat Ryan can be reached on (571)-272-1292. The fax phone number for the organization where this application or proceeding is assigned is (571)-273-8300.

GSE

Geoffrey S. Evans

Geoffrey S. Evans

Primary Examiner

Group 1700